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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/758,119

01/16/2004

Narutoshi Hayashi

Q79461

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23373 7590 12/19/2006  
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EXAMINER

LAVARIAS, ARNEL C

ART UNIT

PAPER NUMBER

2872

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

12/19/2006

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/758,119

Applicant(s)

HAYASHI ET AL.

Examiner

Arnel C. Lavarias

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/11/06, 9/22/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. The Applicants' arguments filed 10/11/06 and 9/22/06 have been fully considered but they are not persuasive.
2. The Applicants argue that, with respect to Claim 1, as well as Claims 2-3, 5, 12-14 which depend on Claim 1, the teachings of Andreatta, along with the extrinsic evidence presented by Ignatov et al., fail to teach or reasonably suggest the dye having a tabular molecular shape coated on the rubbed surface of the substrate being oriented roughly perpendicular to the rubbing direction. The Examiner respectfully disagrees. The Examiner again refers to the remarks made in Section 4 of the Office Action dated 3/22/06. It is again noted that the *ensemble* of molecules of the dye disclosed in Andreatta clearly align with the rubbing direction in the alignment layer. Though Andreatta does not explicitly disclose that the *individual planar or tabular shape of each molecule* in the ensemble of molecules are oriented roughly perpendicular to the rubbing direction, such would necessarily be inherent to the molecules of the dye disclosed in Andreatta, since the same type of dyes and the same type of alignment methods are utilized. Again, extrinsic evidence for this was provided by Ignatov et al.
3. The Applicants further argue that, with respect to Claims 1, 12-14, the claims of U.S. Patent No. 6965473 do not render obvious the claimed invention. The Examiner respectfully disagrees. It is noted that Applicants' response is merely argumentative, and

fails to provide any objective evidence to show why the claims of U.S. Patent No.

6965473 do not render obvious the claimed invention. See MPEP 716.01(c) and 2145.

4. Claims 1-3, 5, 12-14 are again rejected as follows.

### ***Double Patenting***

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1, 12-14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Claims 1-9 of U.S. Patent No. 6965473, of record. Although the conflicting claims are not identical, they are not patentably distinct from each other because U.S. Patent No. 6965473 similarly discloses a polarizing plate (See Claims 1-4 of U.S. Patent No. 6965473) comprising a polarizing layer having a thickness of about 20 nm to 1500 nm formed by rubbing at least one surface of a substrate; coating

the rubbed surface of the substrate with an aqueous solution containing a dye having a tabular molecular shape; and drying the solution, wherein the dye having a tabular molecular shape coated on the rubbed surface of the substrate is oriented roughly perpendicular to the rubbing direction. U.S. Patent No. 6965473 additionally discloses a liquid crystal display device comprising the polarizing plate according to Claim 1 laminated on a liquid crystal cell with the polarizing layer being positioned closer to the liquid crystal cell (See Claim 7 of U.S. Patent No. 6965473); a front polarizing plate is placed on a surface of the liquid crystal cell opposite to the surface on which the polarizing plate is laminated (See Claim 8 of U.S. Patent No. 6965473); and the front polarizing plate is the same as the polarizing plate placed opposite to the liquid crystal cell (See Claim 9 of U.S. Patent No. 6965473).

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 5, 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Andreatta (WO 96/07941 A1), of record.

Andreatta discloses a polarizing plate comprising a polarizing layer (See Page 3, line 4) having a thickness of about 20 nm to 1500 nm formed by rubbing at least one surface of a substrate (See Page 24, "The Alignment Layer and the Preparation Process", and

Page 25, "Preparation Methods"); coating the rubbed surface of the substrate with an aqueous solution (See Page 24, "The Alignment Layer and the Preparation Process", and Page 25, "Preparation Methods") containing a dye having a tabular molecular shape (See for example Pages 21-22; Tables 2-1 to 2-4; which discloses perylene-type dye and anthraquinone-type dye); and drying the solution (See Page 24, "The Alignment Layer and the Preparation Process", and Page 25, "Preparation Methods"), wherein the dye having a tabular molecular shape coated on the rubbed surface of the substrate is oriented roughly perpendicular to the rubbing direction.

The recitation of the manner in which the polarizing layer is formed is recognized as requiring the presence of a rubbed substrate surface, and associated rubbing direction, and as requiring the layer to be a dried, oriented layer of molecules having a tabular molecular shape with the tabular molecular shape oriented "roughly perpendicular" to the rubbing direction. That is, the recitation of the layer as having been coated as "an aqueous solution" is believed to be a process limitation that does not impart any recognizable distinguishing characteristic to the final product.

"Process limitations cannot impart patentability to product claim where product is not patentably distinguished over prior art."  
*In re Dike*, 157 USPQ 581 (CCPA 1968).

It is well-settled that the "[p]resence of process limitations in product claims, which product does not otherwise patentably distinguish over prior art, cannot impart patentability to that product." *In re Stephens*, 345 F.2d 1020 (CCPA 1965), 145 USPQ 565, citing *Dilnot*. In any event, Andreatta discloses solution coating and drying on the rubbed substrate (See Page 24, "The Alignment Layer and the Preparation Process", and

Page 25, "Preparation Methods"), and disclose that some of the solutions may be aqueous.

Thus, Andreatta expressly discloses every positively recited structural limitation, and is silent only as to the orientation of the *tabular* molecules. Nonetheless, since Andreatta discloses the same type of dyes and alignment method, the Examiner has reasonable belief that the tabular molecular shape inherently will be oriented "roughly perpendicular" to the rubbing direction, as recited. If such is not the case, then Applicants should demonstrate that this feature is not inherent. *In re Swinehart*, 169 USPQ 226 (CCPA 1971). That is, the perylenes and anthraquinones of Andreatta may be pendant from the PTFE chain at any of a plurality of sites (at either end of their form), and still be regarded as being oriented "roughly perpendicular" to the PTFE chain (and thus to the rubbing direction).

Additionally, Andreatta discloses that the layer can be on another alignment layer, the other alignment layer comprising polyester (See Page 28, lines 24-28).

Andreatta further discloses a liquid crystal display device (See Figures 1-2) comprising the above polarizing plate (See for example 1, 1' in Figures 1-2) laminated on a liquid crystal cell with the polarizing layer being positioned closer to the liquid crystal cell; a front polarizing plate is placed on a surface of the liquid crystal cell opposite to the surface on which the polarizing plate is laminated (See for example 1, 1' in Figures 1-2); and the front polarizing plate is the same as the polarizing plate placed opposite to the liquid crystal cell (See for example 1, 1' in Figures 1-2).

*Conclusion*

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arnel C. Lavarias whose telephone number is 571-272-2315. The examiner can normally be reached on M-F 9:30 AM - 6 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2872

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Arnel C. Lavarias  
Primary Examiner  
Group Art Unit 2872  
12/11/06

  
ARNEL LAVARIAS  
PRIMARY PATENT EXAMINER